UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,092	04/14/2004	Ajay Kumar	5681-72300	6152

35690 7590 03/01/2007	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.	NGUYEN, CINDY	
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AUSTIN, TX 78701	ART UNIT	PAPER NUMBER
	2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/824,092	KUMAR, AJAY
	Examiner	Art Unit	
	Cindy Nguyen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01/04/07</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This is in response amendment filed 01/04/07.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new

ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claim 28-39 recites the limitation "the computer-accessible medium" in claim 27.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section
122(b), by another filed in the United States before the invention by the applicant for
patent or (2) a patent granted on an application for patent by another filed in the United
States before the invention by the applicant for patent, except that an international
application filed under the treaty defined in section 351(a) shall have the effects for
purposes of this subsection of an application filed in the United States only if the
international application designated the United States and was published under Article
21(2) of such treaty in the English language.

Claims 1, 3-5, 7, 9, 10, 14, 16-18, 20, 22, 23, 27, 29-31, 33, 35 and 36 are rejected under 35

U.S.C. 102(e) as being anticipated by anticipated by Leong et al. (US 20030182292) hereafter (Leong).

Regarding claims 1, 14 and 27, Leong discloses: a system, a method and a computer-accessible

storage medium, comprising: a processor, (2, fig. 2, Leong); and

Memory (20, fig. 2, Leong) coupled to the processor and configured to store program instructions

executable by the processor to implement a class structure based data object enhancer configured

to (paragraph 0029, Leong):

input one or more classes (paragraphs 0030, Leong);

analyze the structure of the one or more classes to determine a persistence structure for data of

the one or more classes to be persisted (0032, 0036, Leong); and

generate one or more enhanced classes corresponding to the one or more classes such that the

one or more classes are enhanced to persist the data to be persisted according to the persistence

structure (0032, 0035-0038, Leong).

Regarding claims 3, 16, 29, all the limitations of this claim have been noted in the rejection of

claims 1, 14 and 27 above. In addition, Leong discloses: wherein to analyze the structure of the classes,

the class structure based enhancer is configured to parse bytecode of the one or more classes to

determine class and field attributes (0043, Leong).

Regarding claims 4, 17 and 30, all the limitations of this claim have been noted in the rejection

of claims 1, 14 and 27 above. In addition, Leong discloses: wherein the class structure based enhancer

is further configured to generate metadata that includes the results of the analysis of the structure of the

one or more classes (0026-0028, Leong).

Regarding claims 5, 18, 31, all the limitations of this claim have been noted in the rejection of claims 4, 17 and 30 above. In addition, Leong discloses: wherein the generated metadata is output explicitly as a metadata file (0032-0036, Leong).

Regarding claims 7, 20 and 33, all the limitations of this claim have been noted in the rejection of claims 1, 14 and 27 above. In addition, Leong discloses: wherein the persistence structure corresponds to the structure of the one or more classes (0031, Leong).

Regarding claims 9, 22 and 35, all the limitations of this claim have been noted in the rejection of claims 1, 14 and 27 above. In addition, Leong/ Vachuska discloses wherein to determine a persistence structure for the data of the one or more classes the class structure based enhancer is configured to apply one or more rules to the results of Java reflection calls to or byte code parsing of the one or more input classes (0037-0039, Leong).

Regarding claims 10, 23, 36, all the limitations of this claim have been noted in the rejection of claims 1, 14 and 27 above. In addition, Leong discloses wherein the rules applied by the class structure based enhancer include persisting class fields that are not static or transient (0037, 0038, Leong).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 6, 8, 11, 13, 15,, 19, 21, 22, 25- 26, 28, 32, and 34, 37-39 are rejected under 35 U.S.C.

103(a) as being unpatentable over Leong et al. (US 20030182292) (hereafter Leong) in view of

Vachuska et al. (US 20040044687).

Regarding claims 2, 15 and 28, all the limitations of this claim have been noted in the rejection

of claims 1, 14 and 27 above. However, Leong didn't disclose: wherein to analyze the structure of the

classes, the class structure based enhancer is configured to make one or more Java reflection calls to the

one or more classes. On the other hand, Vachuska discloses: wherein to analyze the structure of the

classes, the class structure based enhancer is configured to make one or more Java reflection calls to the

input classes (0024, Vachuska). Thus, at the time invention was made, it would have been obvious to a

person of ordinary skill in the art to include wherein to analyze the structure of the classes, the class

structure based enhancer is configured to make one or more Java reflection calls to the one or more

classes in the system of Leong as taught by Vachuska. The motivation being to provides classes and

interfaces for obtaining reflective information about class and objects.

Regarding claims 6, 19 and 32, all the limitations of this claim have been noted in the rejection

of claims 5, 18, 31 above. In addition, Leong/Vachuska discloses: wherein the metadata file is an

extensible markup language (XML) file (0046, Vachuska). Thus, at the time invention was made, it

would have been obvious to a person of ordinary skill in the art to include wherein to analyze the

structure of the classes, the class structure based enhancer is configured to make one or more Java

reflection calls to the input classes in the system of Leong as taught by Vachuska. The motivation being

to translate the java program source code into java bytecodes, which are instructions for a virtual

computer, called the java virtual machine and class files may store in memory.

Regarding claims 8, 21, 34, all the limitations of this claim have been noted in the rejection of

claims 1, 14 and 27 above. In addition, Leong/ Vachuska discloses wherein the persistence structure

maps the data to be persisted to a single table in a database (0026, Vachuska).

Regarding claims 11, 24, 37, all the limitations of this claim have been noted in the rejection of

claims 1, 14 and 27 above. In addition, Leong/ Vachuska discloses wherein the rules applied by the

class structure based enhancer include storing persistent fields of a given class in a table

corresponding to that class in a database (0044, Vachuska).

Regarding claims 12, 25 and 38, all the limitations of this claim have been noted in the

rejection of claims 1, 14 and 27 above. In addition, Leong/Chan discloses: wherein the one or more

classes are comprised in a Java Archive (JAR) file (col. 5, lines 29-42, Chan).   Thus, at the time

invention was made, it would have been obvious to a person of ordinary skill in the art to include

wherein the one or more classes are comprised in a Java Archive (JAR) file in the system of Leong

as taught by Chan. The motivation being to creating jar files, flexibility in use and design of such

programs would be enhanced if the entry name of a class file and other file to be placed in jar archive

could be assigned a name that is independent of wherein the file is physically located on a file system.

Regarding claims 13, 26, 39, all the limitations of this claim have been noted in the rejection of

claims 1, 14 and 27 above. In addition, Leong/ Vachuska discloses, wherein the class structure based

enhancer is further configured to output the enhanced one or more classes and a database schema for storing the data to be persisted in a persistent data store (0044-0046, Vachuska). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include wherein the class structure based enhancer is further configured to output the enhanced one or more classes and a database schema for storing the data to be persisted in a persistent data store in the system of Leong as taught by Chan. The motivation being to enable the system performs the tasks of storing and retrieving objects from the database (0046, Vachuska).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
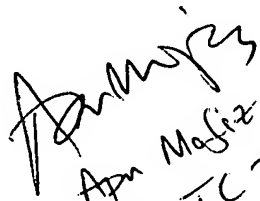
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Å. Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cindy Nguyen